

Utilising signal measurement in bandwidth reservation scheme for QoS provisioning in multimedia wireless networks

ABSTRACT

Next generation multimedia wireless networks require guaranteed quality of service (QoS) over the duration of mobile connections, and also require efficient use of network resources. In this paper, bandwidth reservation scheme is proposed for QoS provisioning in multimedia wireless networks. The proposed scheme integrates user mobility information obtained by measuring Received Signal Strength (RSS) for determining the next cell the mobile user is likely to move to. Simulation results demonstrate that the proposed scheme can guarantee the required QoS requirements in terms of handoff call dropping probability and new call blocking probability while maintaining efficient use of network resources.

Keyword: Bandwidth reservation; Multimedia wireless network; QoS